The amount of carination of the lower pinnules varies considerably, just as it does in *Actinometra solaris* (Pl. LIII. figs. 3–22). As a general rule the first pair of pinnules have their basal joints somewhat produced towards the dorsal side, and in the next two pairs the second and third joints have rather prominent keels, traces of which are sometimes visible as far as the twelfth or fifteenth brachial. The terminal comb, which is very well developed on the basal pinnules, becomes gradually smaller and disappears about the sixth or seventh brachial.

The visceral mass of *Actinometra paucicirra*, like that of *Actinometra solaris*, which occurs at the same locality, is somewhat readily detached from the calyx, and it was occasionally dredged in an isolated condition. It is not so completely plated as that of *Actinometra solaris* often is. For the ambulacra are unprotected, and the interradial areas are covered by larger and more nodular plates than in the latter species (Part I., pl. liv. figs. 10, 11; pl. lv. fig. 1). Both species, however, may sometimes have the calcareous deposits considerably reduced in extent, though they are rarely entirely absent (Part I., pl. lv. fig. 2). The figured specimen of *Actinometra paucicirra* shows a small *Anilocra* living in the anal tube.

One tetra-radiate individual of this species occurred among all those dredged by the Challenger. An examination of the disk shows that the anterior ray A is missing, so that the mouth comes to be interradial, between the radii E and B, while the anus as usual lies between C and D. The only other species which presents the same arrangement of the arm divisions as occurs in *Actinometra paucicirra* is a new form from Mergui, which differs from it in having normally two, and sometimes three, postradial axillaries, and also in the presence of some thirty cirri on the centro-dorsal.

3. The *Typica*-group.

Tridistichate species with the radial axillaries and all the post-distichal axillaries united to the preceding joints by syzygy.

Remarks.—This group contains four of those abnormal species in which the two outer radials and the first two joints above the distichal and every subsequent axillary are respectively united by syzygy; while the distichal series itself consists of the usual three joints, with the axillary a syzygy. They are all confined to the Eastern Archipelago and Western Pacific, three of the four being purely littoral species; while *Actinometra typica* was also obtained by the Challenger in the neighbourhood of Fiji, from a depth of over 200 fathoms. The rays of this species, and also those of *Actinometra multibrachiata* divide very frequently, the number of postradial axillaries being sometimes as many as seven (Pl. LVI. fig. 3; Pl. LVII. fig. 1); whereas in *Actinometra distincta* there is no